

REMARKS

The undersigned wishes to thank Examiners Fitzgerald and Mai for the courtesies extended to the undersigned and Jeffrey Hundley during the interview of February 10, 2004. During the interview the inventor, Jeffrey Hundley, discussed the innovative structural panel described and claimed in the patent application as well as brought a prototype for review. Based upon the Examiners' comments and suggestions, Applicant has amended the claims.

Claims 32 through 36, 41, 44 through 46 and 50 stand rejected under 35 U.S.C. § 103(a) for obviousness over United States Patent Nos. 3,184,012 to Fujishima; 4,441,289 to Ikuo; and 6,158,188 to Shahnazarian. Claim 49 stands rejected under 35 U.S.C. § 103(a) for obviousness over the Fujishima patent, the Ikuo patent and the Shahnazarian patent in view of United States Patent No. 5,375,382 to Weidlinger. Claims 51 and 55 stand rejected under 35 U.S.C. § 103(a) for obviousness over the Fujishima patent and the Shahnazarian patent. Claims 37 through 40, 42, 43, 47, 48 and 52 through 54 are withdrawn. Claim 55 stands rejected under 35 U.S.C. § 112, second paragraph.

In response claims 32 and 51 have been amended. Claims 35 through 41, 43 and 52 through 55 have been canceled. New claims 56 and 57 have been added.

Claim 32 is directed to a structural panel and includes a first track, a second track, a plurality of elongated members therebetween connected to secure the first track to second track, at least one pair of brackets, and a cross member passing through the brackets. The claim has been amended to more clearly define the brackets. Specifically, the brackets are pentagon shaped wherein each of the brackets has a continuous unitary member. Further, claim 32 has also been amended to require a third passageway through the cavity wall positioned opposite the second passageway, wherein the second penetration line passes through the third passageway. Specifically, the brackets have been amended to specifically claim the bracket shown in Figs. 1 through 5.

Applicant's invention, as set forth in amended claim 32, is directed to a structural panel that overcomes many of the problems in prior art structural panels. Specifically, the panel is a structural panel which is primarily used in multi-story structures. The cross members are adapted to stress the panel resulting in a post-stressed, load bearing shear panel. To achieve superior results, the claimed invention requires a unitary continuous

bracket that is pentagon shaped, such as shown in Fig. 4. An important aspect of the claimed invention is the provision of a third passageway positioned opposite the second passageway as shown by reference numerals 155A and 145A in Fig. 4. This arrangement permits ease of assembly of multistory buildings such as shown in Fig. 5.

The cited prior art of record neither teaches nor suggests the arrangement as set forth in amended claim 32. Specifically, the Examiner is improperly taking specific teachings of the references and picking and choosing various elements. Specifically, the Fujishima patent discloses a non-continuous bracket arrangement as shown in Fig. 4. The non-continuous arrangement of that bracket will result in high stress concentration levels. Further, there is no teaching or suggestion in this reference to provide a convex shaped arrangement surrounding the first passageway.

The Ikuo patent likewise does not teach or suggest a continuous unitary bracket. The bracket 8a has a continuous open bottom. See for example Fig. 6. The Shahnazarian patent requires the brackets to be multi-piece. Specifically, the hold down 10 includes a separate clamp member 40 which is pressed against the seat member along the adjacent sidewalls and, consequently, braces the seat against distortion in use and, also, raises the sidewalls by clamping the seat surface portions adjacent and along the lengths of the sidewalls. This arrangement cannot operate in the manner intended if the clamp member is part of a continuous unitary member.

Further, none of the cited prior art references teaches or suggests a third passageway through the cavity wall positioned opposite the second passageway, where the second penetration line passes through the third passageway. Therefore, claim 32 is patentable over the cited prior art of record.

Claims 42 and 44 through 50 depend from claim 32 either directly or indirectly and are believed to be patentable for at least the same reasons claim 32 is patentable. Further, claim 42 requires that the first passageway is biased toward the first side. This feature is shown in Fig. 3. This bias permits each cross member to be positioned in a different plane relative to the other cross member. See paragraph 0038 of the specification. This arrangement minimizes mechanical interference between two separate cross members when used with the claimed structural panel.

Claim 51, as amended, requires each bracket to be a continuous, unitary member having three passageways. It is believed that claim 51 is patentable over the cited prior art for the same reasons that claim 32 is patentable.

New claims 56 and 57 have been added and depend from claim 51. Claim 56 requires the first passageway to be biased toward the first side, similar to claim 42. Claim 57 requires the panel cross members to be tensioned, resulting in a structural post-stressed member for use on a multi-story building. Support for these new claims can be found in the specification. No new matter has been added.

In view of the foregoing, it is believed that pending claims 32, 33, 34, 42, 44 through 51, 56 and 57 are patentable over the prior art of record and in condition for allowance. Reconsideration of the rejections is respectfully requested.

Respectfully submitted,

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